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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/759,389	01/12/2001	Albert Young	3COM-3347.WHD	1629

7590 01/21/2004

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EXAMINER
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OSMAN, RAMY M

ART UNIT	PAPER NUMBER
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2157

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DATE MAILED: 04/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/759,389

Applicant(s)

YOUNG ET AL.

Examiner

Ramy M Osman

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4-6,13,14,21,24-26 is/are rejected.
- 7) ☒ Claim(s) 2,3,7-12,15-20,22,23 and 27-32 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Specification*

1. The abstract of the disclosure is objected to because of minor informality. Page 36 line 17, change "that is lower than that" to "which is lower than that".

Correction is required. See MPEP § 608.01(b).

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1,4,5,13,14,21,24 and 25 rejected under 35 U.S.C. 102(e) as being anticipated by Watanabe et al. (US Patent No. 6,285,662).
4. In reference to claims 1,13 and 21, Watanabe teaches a communication network including a plurality of stations, a method of accessing said network for a first station, from said plurality of stations, comprising the steps of:

monitoring a load of traffic over said communication network; measuring said load of traffic over said communication network (column 4 line 10 – column 5 line 67 and column 7 line 15 – column 9 line 67, Watanabe discloses monitoring and measuring network activity);

dynamically setting a minimum contention window (CW) value of a contention window according to said load of traffic over said communication network (column 4 line 10 – column 5 line 67 and column 7 line 15 – column 9 line 67, Watanabe discloses setting a contention window based on network transmissions).

5. In reference to claims 4 and 24, Watanabe teaches the network of claim 1 above, wherein said step of monitoring is implemented asynchronously (column 7 line 45 – column 8 line 67, Watanabe discloses monitoring that is not based on any timing or clock).

6. In reference to claims 5,14 and 25, Watanabe teaches the network of claim 1 above, wherein said plurality of stations are substantially compliant with a version of the IEEE 802.11 protocol (column 2).

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 6 and 26 rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al. (US Patent No. 6,285,662) in view of Johnson (US Patent No. 5,864,558).

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Watanabe teaches the network of claim 1 above. Watanabe teaches measuring network activity and setting a contention window size to reduce collisions (column 4 line 10 – column 5 line 67 and column 7 line 15 – column 9 line 67). Watanabe fails to explicitly teach wherein said step of measuring said load of traffic includes calculating a collision rate. However, Johnson teaches measuring network traffic by calculating a collision rate (Summary).

It would have been obvious for one of ordinary skill in the art to modify Watanabe by measuring the network activity by calculating a collision rate as per the teachings of Johnson so as to have an accurate estimate of the collision rate when setting the contention window.

***Allowable Subject Matter***

9. Claims 2,3,7-12,15-20,22,23 and 27-32 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. The following is a statement of reasons for the indication of allowable subject matter:

The following limitations if rewritten in independent form would indicate allowable subject matter:

Calculating said collision rate by dividing said total number of collisions by the sum of said number of transmissions and said total number of collisions;

Selecting a contention window value from a range:

for said collision rate between zero up to and including 25 percent, said minimum CW value is three slots; for said collision rate between greater than

25 percent up to and including 50 percent, said minimum CW value is seven slots;

for said collision rate between greater than 50 percent up to and including 75 percent, said minimum CW value is fifteen slots; and

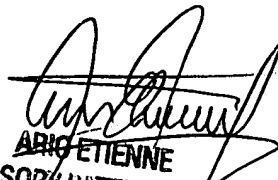
for said collision rate greater than 75 percent, said minimum CW value is 31 slots.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramy M Osman whose telephone number is (703) 305-8050. The examiner can normally be reached on Monday through Friday 9AM to 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (703) 305-7562. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RMO  
April 14, 2004

  
ARIO ETIENNE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100